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REMARKS

Claims 1 and 4 - 21 remain pending in this application. It is respectfully submitted, based on the following remarks, that all of the presently pending claims are in condition for allowance.

Claim 4 stands objected to as containing an informality. The Examiner has suggested the claim language be amended to recite "...the distal half of the intramedullary pin further includes a transverse borehole..." However, it is noted that an amendment to claim 4 addressing this objection was submitted in the communication dated June 17, 2007. Applicants request that this amendment be entered and the objection to claim 4 be withdrawn.

Claims 1 - 3, 7, 9, 13 and 21 stand rejected under 35 U.S.C. § 102(b) as anticipated by U.S. Pat. No. 6,077,264 to Chemello. ("Chemello").

Initially, it is noted that claims 2 and 3 were cancelled in the communication dated 6/27/2007. Thus, the rejection of these claims will not be further addressed.

Claim 1 recites a bone fixation device comprising "an intramedullary pin having a longitudinal axis, a proximal end, and a distal tip configured and dimensioned for insertion into a medullary canal of a bone, the intramedullary pin having a total length with proximal and distal halves, and the proximal half of the intramedullary pin includes at least one borehole passing through the intramedullary pin transverse to the longitudinal axis, the at least one borehole defining a transverse axis; a bone plate disposed at the proximal end of the intramedullary pin, the bone plate having a length extending toward the distal tip of the intramedullary pin and adapted to lie in contact with the greater trochanter; wherein the length of the plate ends proximally above the borehole in the intramedullary pin; and wherein the bone plate includes an angled tab configured and dimensioned to have a center of gravity lying on a radius of a cross-sectional area of the intramedullary pin taken orthogonally to the intramedullary pin's longitudinal axis and enclosing an angle  $\beta$  relative to a plane defined by the transverse borehole axis and the intramedullary pin's longitudinal axis, where angle  $\beta$  is between  $0^\circ$  and  $+100^\circ$  or between  $0^\circ$  and  $-100^\circ$ ."

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In contrast, Chemello discloses a nail for insertion into a thigh bone wherein the nail object may be employed with a bushing 9 comprising a lip 91. (*See* Chemello, col. 3, li. 55 – col. 6, li. 22). However, it is noted that the Chemello device fails to teach or suggest a “bone plate includ[ing] an angled tab configured and dimensioned to have a center of gravity lying on a radius of a cross-sectional area of the intramedullary pin taken orthogonally to the intramedullary pin’s longitudinal axis and enclosing an angle  $\beta$  relative to a plane defined by the transverse borehole axis and the intramedullary pin’s longitudinal axis, where angle  $\beta$  is between  $0^\circ$  and  $+100^\circ$  or between  $0^\circ$  and  $-100^\circ$ ,” as recited in claim 1 or “an angled tab with a center of gravity, the angled tab configured and dimensioned such that a first plane defined by the center of gravity and the longitudinal axis intersects a second plane defined by the transverse borehole axis and the longitudinal axis at an angle  $\beta$  of between  $0^\circ$  and  $+100^\circ$ ,” as recited in claim 21. The Examiner purports that the Chemello device is “capable of being dimensioned wherein the center of gravity of the tab lies on a radius of a cross-sectional area of the intramedullary pin taken orthogonally to the longitudinal axis of the pin,” thereby indicating that the Chemello device would have to be dimensioned/modified into an embodiment other than what is disclosed in order to show the limitations of claims 1 and 21. (*See* Office Action, 9/17/07, p. 3). The Examiner goes on to recite that “it would be an obvious matter of design choice, since it has been held that where the general conditions of a claim are disclosed in the prior art, i.e. the ranges from 0 to 100 degrees or from 0 to  $-100$  degrees, discovering the optimum or workable ranges, i.e. the ranges from 40 to 50 degrees or  $-40$  to  $-50$  degrees, involves only routine skill in the art,” thereby further stressing the fact that Chemello fails to illustrate or describe elements recited in claims 1 and 21. (*See* Office Action, p. 11).

It is noted that 35 U.S.C. § 102(b) rejections are to be applied in cases where the “invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.” It is hereby noted, on account of the aforementioned language explicitly noting that the Chemello prior art reference must be modified in order to meet the limitations of claims 1 and 21 in the Office Action dated September 17, 2007, that a 35 U.S.C. § 102(b) rejection is improper and can not be upheld in this case. Accordingly, it is submitted that the 35 U.S.C. § 102(b) rejection of claims 1, 7, 9, 13 and 21 be withdrawn.

Furthermore, it is submitted that Chemello fails to suggest a bone plate “wherein the

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length of the plate ends proximally above the borehole in the intramedullary pin; and wherein the bone plate includes an angled tab configured and dimensioned to have a center of gravity lying on a radius of a cross-sectional area of the intramedullary pin taken orthogonally to the intramedullary pin's longitudinal axis and enclosing an angle  $\beta$  relative to a plane defined by the transverse borehole axis and the intramedullary pin's longitudinal axis, where angle  $\beta$  is between  $0^\circ$  and  $+100^\circ$  or between  $0^\circ$  and  $-100^\circ$ , as recited in claim 1.

Specifically, it is noted that Chemello is directed toward a nail comprising a bushing 9 "the body of which is coupled with the non-cylindrical part of the nail positioned inside the bone, rests on the outer surface of the bone by means of one or more lips". (See Chemello, col. 2, ll. 1-9). Chemello does not disclose or suggest the placement of the lip of the device in a position wherein the lip is "configured and dimensioned to have a center of gravity lying on a radius of a cross-sectional area of the intramedullary pin taken orthogonally to the intramedullary pin's longitudinal axis and enclosing an angle  $\beta$  relative to a plane defined by the transverse borehole axis and the intramedullary pin's longitudinal axis, where angle  $\beta$  is between  $0^\circ$  and  $+100^\circ$  or between  $0^\circ$  and  $-100^\circ$ ", as recited in claim 1. The Examiner has noted that "the tab is capable of being dimensioned wherein the center of gravity of the tab lies on a radius of a cross-sectional area of the intramedullary pin taken orthogonally to the longitudinal axis of the pin and encloses an angle beta relative to a plane defined by the transverse borehole axis". (See Office Action, 9/17/07, p. 3). However, it is noted that even when a device is capable of being modified to meet the claim limitations -- which we do not concede is the case here -- there must be a suggestion or motivation in the prior art reference to do so. (See *In re Mills*, 916 F.2d at 682, 16 USPQ2d at 1432, Fed. Cir. 1990). It is noted that there is no motivation in the Chemello device to make the proposed modification. Nor has the Examiner pointed to or suggested such a motivation. The Examiner has not identified any elements by number as corresponding to the various claimed elements. However, it is noted that Chemello is silent with respect to the location of the center of gravity of any of its elements and, in particular with respect to the lip 91 of bushing 9. Therefore, it is respectfully submitted that Chemello provides absolutely no motivation for the modification suggested by the Examiner.

Accordingly, it is respectfully submitted that claim 1 is allowable over Chemello and applicants respectfully request that the rejection of claim 1 be withdrawn. Since claims 7, 9 and 13 depend from and therefore include all of the limitations of claim 1, it is respectfully submitted

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that these claims are also allowable.

Claim 21 recites limitations substantially similar to those of claim 1, including an "angled tab with a center of gravity, the angled tab configured and dimensioned such that a first plane defined by the center of gravity and the longitudinal axis intersects a second plane defined by the transverse borehole axis and the longitudinal axis at an angle  $\beta$  of between  $0^\circ$  and  $+100^\circ$ ." Accordingly, it is submitted that claim 21 is allowable over Chemello for the same reasons noted above with regard to claim 1.

Claims 6 and 16 stand rejected under 35 U.S.C. § 103(a) as obvious over Chemello.

As noted above, Chemello fails to teach or suggest a bone plate comprising an angled tab "configured and dimensioned to have a center of gravity lying on a radius of a cross-sectional area of the intramedullary pin taken orthogonally to the intramedullary pin's longitudinal axis and enclosing an angle  $\beta$  relative to a plane defined by the transverse borehole axis and the intramedullary pin's longitudinal axis, where angle  $\beta$  is between  $0^\circ$  and  $+100^\circ$  or between  $0^\circ$  and  $-100^\circ$ ", as recited in claim 1 and claim 1 is therefore allowable over Chemello. Claims 6 and 16 depend from and therefore include all of the limitations of claim 1. It is therefore respectfully submitted that claims 6 and 16 are allowable for the same reasons stated above in regard to claim 1.

Claims 1 - 8, 13 and 16 stand rejected under 35 U.S.C. § 103(a) as obvious over Stedtfeld in view of Chemello. In support of the rejection, the Examiner stated that Stedtfeld teaches the device as claimed with the exception of a bone plate attached to the proximal end of the intramedullary pin and that this limitation is disclosed by Chemello. (*See* Office Action, 9/17/07, p. 5).

It is submitted that the Examiner is correct in stating that Stedtfeld fails to disclose a bone plate attached to the proximal end of the intramedullary element much less "an angled tab configured and dimensioned to have a center of gravity lying on a radius of a cross-sectional area of the intramedullary pin taken orthogonally to the intramedullary pin's longitudinal axis and enclosing an angle  $\beta$  relative to a plane defined by the transverse borehole axis and the intramedullary pin's longitudinal axis, where angle  $\beta$  is between  $0^\circ$  and  $+100^\circ$  or between  $0^\circ$  and

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-100°,” as recited in claim 1. However, as noted above with regard to the 35 U.S.C. § 102(b) rejection, Chemello also fails to cure this deficiency. Accordingly, it is submitted that neither Stedtfeld nor Chemello, either alone or in combination, teach or suggest “an angled tab configured and dimensioned to have a center of gravity lying on a radius of a cross-sectional area of the intramedullary pin taken orthogonally to the intramedullary pin’s longitudinal axis and enclosing an angle  $\beta$  relative to a plane defined by the transverse borehole axis and the intramedullary pin’s longitudinal axis, where angle  $\beta$  is between 0° and +100° or between 0° and -100°,” as recited in claim 1. Accordingly, it is respectfully submitted that claim 1 is allowable over Stedtfeld and Chemello taken either alone or separately for the same reasons stated above in regard to the anticipation rejection. Since claims 4 - 8, 13 and 16 depend from and therefore include all of the limitations of claim 1, it is respectfully submitted that these claims are also allowable.

Claim 14 stands rejected under 35 U.S.C. § 103(a) as unpatentable over Stedtfeld in view of Chemello further in view of U.S. Patent No. 5,356,410 to Pennig (“Pennig”).

As noted above, Stedtfeld and Chemello, taken either alone or in combination, fail to teach or suggest a bone plate comprising “an angled tab configured and dimensioned to have a center of gravity lying on a radius of a cross-sectional area of the intramedullary pin taken orthogonally to the intramedullary pin’s longitudinal axis and enclosing an angle  $\beta$  relative to a plane defined by the transverse borehole axis and the intramedullary pin’s longitudinal axis, where angle  $\beta$  is between 0° and +100° or between 0° and -100°,” as recited in claim 1. It is respectfully submitted that Pennig does not cure this deficiency and that claim 14 is allowable over Stedtfeld, Chemello and Pennig for the same reasons stated above in regard to claim 1 from which claim 14 depends.

Claim 18 stands rejected under 35 U.S.C. § 103(a) as obvious over Stedtfeld in view of Chemello further in view of U.S. Patent No. 4,858,602 to Seidel (“Seidel”).

Claim 18 recites limitations substantially similar to those of claim 1, including an angled tab “configured and dimensioned to have a center of gravity lying on a radius of a cross-sectional area of the intramedullary pin taken orthogonally to the intramedullary pin’s longitudinal axis and enclosing an angle  $\beta$  relative to a plane defined by the transverse borehole axis and the

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intramedullary pin's longitudinal axis, where angle  $\beta$  is between  $0^\circ$  and  $+100^\circ$  or between  $0^\circ$  and  $-100^\circ$ ." Accordingly, it is submitted that Stedtfeld and Chemello fail to show or suggest the recited arrangement. It is further submitted that Seidel fails to cure the above noted deficiencies of Chemello and Stedtfeld and that claim 18 is allowable for the same reasons noted above in regard to claim 1. Since claims 19 and 20 depend from and therefore include all of the limitations of claim 18, it is respectfully submitted that these claims are also allowable.

Claims 17, 19 and 20 stand rejected under 35 U.S.C. § 103(a) as obvious over Stedtfeld in view of Chemello in further view of Seidel in further view of Pennig.

As noted above, Stedtfeld, Chemello and Seidel, either alone or in combination, fail to teach or suggest a bone plate comprising "an angled tab configured and dimensioned to have a center of gravity lying on a radius of a cross-sectional area of the intramedullary pin taken orthogonally to the intramedullary pin's longitudinal axis and enclosing an angle  $\beta$  relative to a plane defined by the transverse borehole axis and the intramedullary pin's longitudinal axis, where angle  $\beta$  is between  $0^\circ$  and  $+100^\circ$  or between  $0^\circ$  and  $-100^\circ$ ", as recited in claims 1 and 18. As stated above, Pennig does not cure this deficiency. Accordingly, it is respectfully submitted that Stedtfeld, Chemello, Seidel and Pennig, taken either alone or in any combination neither show nor suggest "an angled tab configured and dimensioned to have a center of gravity lying on a radius of a cross-sectional area of the intramedullary pin taken orthogonally to the intramedullary pin's longitudinal axis and enclosing an angle  $\beta$  relative to a plane defined by the transverse borehole axis and the intramedullary pin's longitudinal axis, where angle  $\beta$  is between  $0^\circ$  and  $+100^\circ$  or between  $0^\circ$  and  $-100^\circ$ ", as recited in claims 1 and 18 and that claims 1 and 18 are allowable. Since claims 17 and 19-20 depend from and therefore include all of the limitations of allowable claims 1 and 18, respectively, it is respectfully submitted that these claims are also allowable.

Claims 1 - 3, 9, 11 and 12 stand rejected under 35 U.S.C. § 103(a) as unpatentable over U.S. Patent No. 4,227,518 to Aginsky ("Aginsky") in view of Chemello.

Aginsky purports to show a nail with a tubular sheath intended to be traversed therethrough a fractured thigh-bone. (See Aginsky, col. 3, ll. 41-56). Aginsky fails to teach or suggest "a bone plate disposed at the proximal end of the intramedullary pin, the bone plate

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having a length extending toward the distal tip of the intramedullary pin and adapted to lie in contact with the greater trochanter; wherein the length of the plate ends proximally above the borehole in the intramedullary pin; and wherein the bone plate includes an angled tab configured and dimensioned to have a center of gravity lying on a radius of a cross-sectional area of the intramedullary pin taken orthogonally to the intramedullary pin's longitudinal axis and enclosing an angle  $\beta$  relative to a plane defined by the transverse borehole axis and the intramedullary pin's longitudinal axis, where angle  $\beta$  is between  $0^\circ$  and  $+100^\circ$  or between  $0^\circ$  and  $-100^\circ$ , as recited in claim 1. The Examiner asserts that this deficiency is cured by Chemello. However, as described above, Chemello neither shows nor suggests these claim limitations and Aginsky fails to cure this deficiency and, for at least this reason, it is respectfully submitted that claim 1 is allowable over Chemello and Aginsky taken either alone or in combination. Since claims 9, 11 and 12 depend from and therefore include all of the limitations of claim 1, it is respectfully submitted that these claims are also allowable.

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CONCLUSION

In light of the foregoing, Applicants respectfully submit that all of the pending claims are in condition for allowance. All issues raised by the Examiner having been addressed, an early and favorable action on the merits is earnestly solicited.

Respectfully submitted,

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